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ABSTRACT OF THE DISCLOSURE

A dirty memory is operable to store dirty indicators, each dirty indicator being settable to a given value indicative that a page of memory associated therewith has been

- 5 dirtied. The dirty indicators are stored in groups with each group having associated therewith a validity indicator computed from the dirty indicator values of the group. The control logic is operable on reading a group to compute a validity indicator value based on the dirty indicator values for the group to determine the integrity of the group. The integrity can be confirmed by comparing the computed validity indicator
- value to a validity indicator value read for the group. Where the value read and the value computed compare equal, it can be assumed that the dirty indicator values of the group are correct. Preferably the validity indicator is a parity indicator. Although parity does not provide for error correction, parity has the advantage that minimal overhead is needed for computation and storage. When a parity error is detected, all
- of the dirty indicators associated with the parity indicator that has flagged a potential error are treated as suspect. As a consequence, when a parity error is detected for a group of dirty indicators, all of the pages of memory associated with those dirty indicators are treated as being dirtied and they are therefore copied between memories. The dirty indicators and the parity indicator are then reset.